

# Heads Up! Code changes affect plumbing

**Comm 83, POWTS** - A totally revised private onsite wastewater treatment code has been adopted, and will be effective about July 1, 2000, although there have been threats of legal action to stop the implementation of the code. Included in the Comm 83 project are updates to other code chapters, including Comm 82 and Comm 84. See the March *WPCR* for more information.

**Comm 5, 82, 84, Credentials, Plumbing, Plumbing Products** - A code change package involving multipurpose fire sprinkler/plumbing systems in one- and two-family dwellings was adopted in February, 2000. The code revisions more clearly define multipurpose systems as plumbing, meaning licensed plumbers must do the installation and maintenance work. Standards are specified for the systems, when they are voluntarily installed by homeowners. Fire sprinkler systems are not mandated in one- and two-family dwellings. The word "credential" was removed from Comm 5. See the February 2000 *WPCR*. The code revisions are expected to go into effect this spring.

**Comm 2, Fees** - A hearing was held in February on proposed fee increases for plan review and credentials in a number of Safety and Buildings Division programs. Hearing comments are now being considered. The changes propose raising the threshold for plan review from 11 fixtures to 16, and to eliminate the need for plan review of four-inch or smaller diameter private interceptor main sewers, among other topics. See the February 2000 *WPCR*.

**Comm 82, Plumbing** - Hearings were held last fall on a "fix-up" package for Comm 82 and 84 that is delayed while changes are made to reflect Comm 83 revisions. The "fix-up" affected alternate and experimental system recognition, performance standards for storm, and various other topics.

For more information, contact Lynita Docken, S&B Plumbing Program Manager, 608-785-9349, [ldocken@commerce.state.wi.us](mailto:ldocken@commerce.state.wi.us).

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## Wisconsin Plumbing Codes Report

Safety and Buildings Division, Department of Commerce

Volume 16 No. 5

May 2000

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### Plan Review Scheduling

For plan review scheduling for Plumbing and Buildings, call the S&B office numbers listed above, or contact the email address shown. Fax scheduling is possible, 877-840-9172. Information about the project will be needed to schedule the plan review. Any of the offices can schedule the first appropriate plan review available statewide.

Plan review for Private Onsite Wastewater Treatment Systems is provided on a first-come, first-served basis. Contact one of the offices for information.

For scheduling info, also see <http://www.commerce.state.wi.us/SB/SB-DailyDoc.html>.

Direct comments, address, suggestions for articles, etc., to Todd Taylor. Fax 608-264-8795. Telephone 608-267-3606.  
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### Public Swimming Pool Reviewer

Dave Russell .....Madison .....608-267-3605

The WPCR is a monthly publication delivered to about 9,700 people as part of their certification, license, or registration with the Wisconsin Department of Commerce, Safety and Buildings Division. Subscriptions are also available. SBD 8340P

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# Lists of licensees on S&B WebSite

S&B is now putting on its WebSite lists of people holding various licenses, registrations, and certifications administered by the division.

The listings include the status of continuing education hours for renewal of the credentials, where there is a con ed responsibility.

The information can be reached by choosing "Credentials" on the left of the S&B WebSite Home Page, <http://www.commerce.state.wi.us/SB/SB-HomePage.html>.

## Event Calendar

Contact the listed Code Consultant for information on the meeting agendas, locations, etc. If you have questions concerning technicalities of the codes which are the subjects of the meetings, contact consultants and reviewers listed on page two of this *WPCR*.

May 24, 2000, Wednesday, **IBC – Energy Code Council**, 8:30 a.m. -2:30 p.m., Thompson Commerce Center, Rm. 3B, 201 W. Washington Ave., Madison, Diane Meredith, [dmeredith@commerce.state.wi.us](mailto:dmeredith@commerce.state.wi.us), 608-266-8982

June 14, 2000, Wednesday, **Multifamily Dwelling Code Council**, 9:15 a.m. - 3 p.m., Wisconsin Builders Association, 4868 High Crossing Blvd, Madison, Sam Rockweiler, [srockweiler@commerce.state.wi.us](mailto:srockweiler@commerce.state.wi.us), 608-266-0797

June 19, 2000, Monday, **IBC - HVAC Code Council**, 8:30 a.m. -2 p.m., Thompson Commerce Center, Rm. 3C, 201 W. Washington Ave., Madison, Jean MacCubbin, [jmaccubbin@commerce.state.wi.us](mailto:jmaccubbin@commerce.state.wi.us), 608-266-0955

### Subscription and address change information

**For those of you who receive the *WPCR* free** because you have a particular license administered by the Safety and Buildings Division, address changes should be provided to the S&B Credential Unit, [madisoncred@commerce.state.wi.us](mailto:madisoncred@commerce.state.wi.us), 608-261-8500.

**People with paid subscriptions**, may request service and address changes from Material Orders, PO Box 2509, Madison, WI 53701. Fax 608-261-6699. Telephone 608-267-4405. Email [phobbs@commerce.state.wi.us](mailto:phobbs@commerce.state.wi.us)

Subscriptions are \$20, payable in advance to the Safety and Buildings Division for 12 monthly issues.

S&B WebSite <http://www.commerce.state.wi.us/SB/SB-HomePage.html>



# ----- Employment Opportunity -----

## Section Chief, Safety and Buildings Division, Bureau of Integrated Services, Madison Area

Department of Commerce; Safety and Buildings Division, Integrated Services Bureau. Starting salary is between \$ 43,275 and \$63,508 per year, depending upon qualifications, plus excellent benefits. A two-year career executive trial period may be required. **Job Duties:** Direct a section that is responsible for a variety of complex engineering and technical plan review, consultation, and credential programs. This includes reviews of plans and specifications for designs, devices, products, materials and constructed environments regulated by the Safety and Buildings Division. Implement statutory mandates and administrative policies related to the review of plans for constructed environments and credentials of trade professionals. Act as a technical consultant for other bureau staff, other states, local and federal agencies, model code groups, private organizations, regulated communities, the general public, and the legislature. Supervise professional, technical and administrative staff within the section. **Knowledge Required:** General management principles; knowledge of building, HVAC, and structures design and plan review; erosion control; and also plumbing and private sewage design and plan review; supervisory

practices and principles for represented technical staff; and knowledge of credential policies. **To Apply:** Apply with the Application for State Employment form (DER-MRS-38); a resume and a letter of interest limited to two typed pages detailing your education, training, and experience (including years of experience) related to: 1) Technical knowledge of building, HVAC, erosion control, and structural design and/or plan review, and also plumbing and/or private sewage design and plan review. 2) Supervision of technical staff (e.g. hiring, disciplining, training) technical staff. Include years of experience, type of staff supervised, and a detailed description of your supervisory responsibilities. 3) General management techniques including: strategic planning, short range goal setting, budget development or management, resource allocation, implementation of service delivery, and reengineering evaluation; 4) Cite all engineering or architectural credentials. Send application materials to Dale Bartz, Department of Commerce Personnel; 201 West Washington Avenue; P.O. Box 7970; Madison, WI. 53707-7970, or fax: 608-266-0182; or email: dbartz@commerce.state.wi.us. Application materials must be received by May 31, 2000.

### OSHA Safety for Plumbers

The courses are approved by the Safety and Buildings Division as continuing education for master and journeymen plumbers - "full," restricted appliance, and restricted service (sewer).

<input checked="" type="checkbox"/>	Courses will be held in Racine	Credit Hrs	Class Date & Time	Course	Cost
<input type="checkbox"/>	Module One - Intro. to OSHA, Electrical Safety, Hand and Power Tools, Personal Protective Equipment, Fall Protection (Also approved for Plumbing and POWTS Inspectors.)	8.0	June 6 & 8 4 p.m. to 8 p.m. Must attend both days	#276	\$125
<input type="checkbox"/>	Module Two - Excavations, Hazard Communication, PSM, Material Handling (including forklifts), Scaffolding. (Also approved for Plumbing and POWTS Inspectors.)	9.0	June 13 & 15 4 p.m. to 8:30 p.m. Must attend both days	#280	\$135
<input type="checkbox"/>	Confined Space Entry - Includes Non-permit & Permit Systems, Duties of Supervisors, Attendants, and Entrants, Equipment Uses and Dangers.	8.0	May 23 7 a.m. to 3:30 p.m.	#279	\$125

Pre-registration is required. Registration confirmatiuons with directions will be mailed or faxed. Reproduce this form if needed for additional persons. Class size is limited. No-shows not entitled to a refund.

Company		
Mailing Address		
City	State	Zip
Tele Number	Fax Number	
Attendee's Name	Attendee's Name	

( ) Payment is enclosed. ( ) Purchase order enclosed. I understand full payment is due prior to class date.  
Please return this registration form by fax, or mail with your payment or purchase order to:  
C&I Safety, 1201 South Ohio St, Racine WI 53405 800-461-8851 Fax 262-633-8853

# Plumbing apprenticeship ratios changed

The Bureau of Apprenticeship Standards in the state Department of Workforce Development has temporarily revised the plumbing apprenticeship ratio, based on advice of the state Plumbing Apprenticeship Advisory Committee, in response to market demand.

The revised ratios will take effect on May 1, 2000 and will be reviewed in October to decide whether to keep the higher ratios. The higher ratios will end November 1, 2000, unless action is taken by BAS.

People hired during this window will be able to continue in the apprenticeship system even if the

decision is made in October to change the ratios.

The plumbing industry has been discussing a need for more apprentices to meet current and anticipated heavy demand for licensed skilled workers. The apprenticeship system provides for hiring and training of plumbing apprentices by a business according to the number of skilled licensed plumbing workers employed by that business.

The table shows the current ratio in the standards, the revised ratio, and the resulting possible additional apprentices.

For more information, contact the local apprenticeship committee or the DWD Bureau of Apprenticeship Standards, 608-266-3332.

April 30, 2000 Ratios		May 1, 2000 Revised Ratios		Added Apprentices
Skilled Workers	Apprentices	Skilled Workers	Apprentices	
1 .....	1 .....	1 .....	1 .....	0
2 .....	1 .....	2 .....	2 .....	1
3 .....	2 .....	3 .....	3 .....	1
4 .....	2 .....	4 .....	3 .....	1
5 .....	3 .....	5 .....	5 .....	2
6 .....	3 .....	6 .....	5 .....	2
7 .....	4 .....	7 .....	6 .....	2
8 .....	4 .....	8 .....	7 .....	3
9 .....	5 .....	9 .....	8 .....	3
10 .....	5 .....	10 .....	8 .....	3
11 .....	6 .....	11 .....	9 .....	3
12 .....	6 .....	12 .....	9 .....	3

Where more than 12 skilled workers are employed, the May 1, 2000 ratio will result in three additional apprentices, compared with the April 30, 2000 ratio.

## S&B Bureau of Integrated Services Management Contacts

Bureau Director: Randy Baldwin, 608-267-9152  
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 Shawano Office: Brad Johnson, 715-524-6853  
 Waukesha Office: Tony Rubio, 262-548-8610

## Questions about your continuing education credits?

Check the mailing address back page for a printed line giving your status for inspection-related S&B certifications, licenses, and registrations. Or, call the Credentialing Unit, 608-261-8500. Or, check the S&B WebSite, <http://www.commerce.state.wi.us/SB/SB-HomePage.html>, choose "Credentials."

# Piping systems which serve plumbing and sprinklers become an option this spring, installers need to be trained

By Lynita Docken, S&B Plumbing Program Manager, 608-785-9349, ldocken@commerce.state.wi.us

“Multipurpose piping systems” became recognized options with Comm 82 Plumbing Code changes planned to be effective May 1, 2000.

A “multipurpose piping system” is defined as a “type of water distribution system conveying potable water to plumbing fixtures and appliances and to automatic fire sprinklers, with the intent of serving both domestic water needs and fire protection needs for a **one- or two-family dwelling or manufactured dwelling.**”

The systems can be installed under the supervision of master plumbers and master plumbers - restricted appliance, if those licensees have attended an approved training course. MPRA may work on existing installations only.

These multipurpose systems are not mandated by the state to be installed in homes in Wisconsin; owners may have them installed voluntarily. When the systems are installed, the new rules govern installation of the sprinkler portion of the systems.

The new rules are only for one- and two-family dwellings. Plumbers are not licensed to install automatic fire sprinkler systems in multifamily dwellings, public buildings, or places of employment.

The code changes to Comm 82 adopt a portion of the National Fire Protection Association Standard NFPA13D, 1999 edition, which sets design, installation, and material requirements for one- and two-family fire sprinkler systems.

There are several “Wisconsinisms,” exceptions to NFPA13D, adopted in Comm 82:

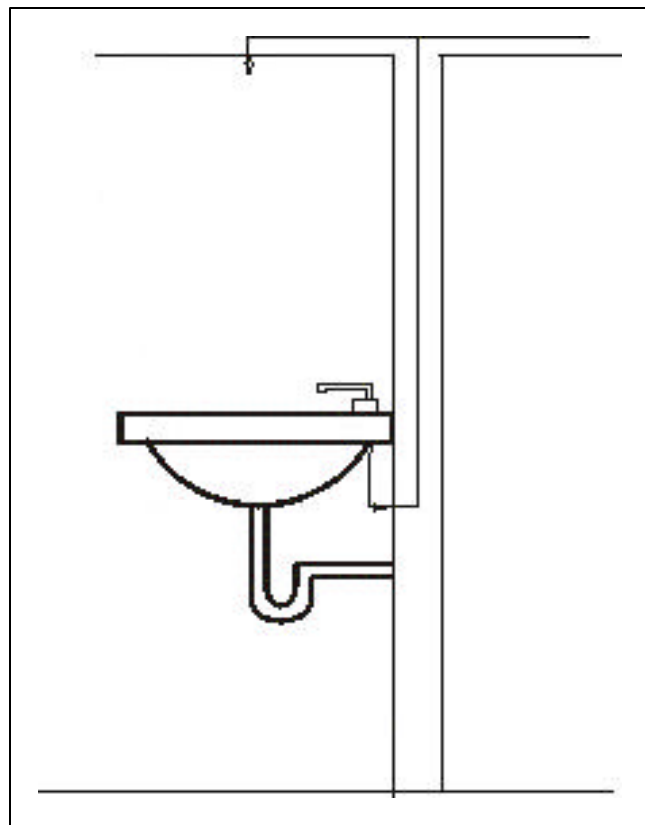
- \* Materials for the multipurpose portion (serving both the fire sprinklers and plumbing fixtures) of the

piping systems must be listed under NFPA13D and Comm Table 84.30-9. Plumbing portions of the system may still comply with only Comm 84 requirements.

- \* Fire department connections are not allowed in multipurpose piping systems.

- \* Although the NFPA13D smoke detector requirement was not adopted, smoke detectors as required by the Uniform Dwelling Code (Comm 21) must be provided in the dwelling served by a multipurpose piping system.

- \* A requirement in NFPA13D from local plumbing or health authorities for permission to install was not adopted in Wisconsin. However, the multipurpose



In this case, the multipurpose piping system provides potable water to a basement washroom lavatory and a basement ceiling sprinkler head.

piping system is a part of a plumbing system and permits may be required by local plumbing ordinances.

- \* No waterflow alarms are required in multipurpose piping systems.

- \* There is no minimum number of sprinklers that may be installed in a dwelling.

- \* There is no maximum distance between two sprinklers; partial systems are allowed.

- \* The minimum distance between two sprinklers is 6 feet in dwellings that do not exceed 2000 square feet in area and that are one story in height with smooth ceilings with a slope not exceeding 10 degrees and a height not exceeding 8 feet for horizontal ceilings and 9 feet for sloped ceilings. For all other dwellings, the minimum distance between two sprinklers is 8 feet.

### Who can do multipurpose installations?

A “full” master plumber may be responsible in a one- or two-family dwelling for installation of a multipurpose piping system or the addition of sprinklers to an existing water distribution system. A journeyman plumber or apprentice may work under

supervision of the master, as in other plumbing installations.

For installation of fire sprinklers on existing water systems in a one- or two-family dwelling, a master plumber - restricted appliance may also be responsible. A journeyman - restricted appliance or a restricted appliance learner may work under supervision of the master - restricted appliance.

After the effective date of the code change, and before installing any multipurpose piping systems, master and master - restricted appliance plumbers must attend a NFPA13D training course approved by S&B.

In 2002, multipurpose piping system requirements will be included in master and master - restricted appliance licensing exams, so after a certain point attendance at classes will not be necessary for people who pass the new exams.

For more information, contact a plumbing plan reviewer or consultant listed on page 2 of this *WPCR*.

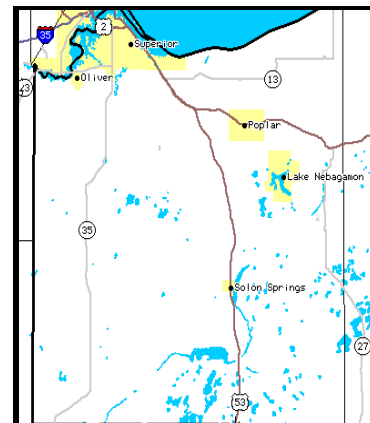
## Employment Opportunities

### Douglas County Planning and Zoning Administrator

This full-time position leads Douglas County’s planning, zoning, housing authority, and land records efforts. Qualifications: Bachelor’s degree. Master’s degree preferred. Certified as a Soil Tester and/or POWTS Inspector, plus five years experience. Full benefits. Apply immediately. Application deadline: Open until filled. Equal Opportunity Employer.

### Assistant Planning and Zoning Administrator

This full-time position assists in administration of Douglas County’s zoning ordinances. Qualifications: Bachelor’s degree in planning, geology, soil science, or related field. Certified as a Soil Tester and/or POWTS Inspector, plus two years of code enforcement experience. Full benefits. Apply immediately, please. Application deadline: Open until filled. Equal Opportunity Employer.



# Revised Comm 83 uses *Plumbing Products Register* to help determine tank size

by Mike Beckwith, S&B Plumbing Products Reviewer

The new Comm 83, Private Onsite Wastewater Treatment Systems Code, relies on product approval to determine the volume and type of wastewater that a septic tank can treat. The required size of both septic tanks and aerated tanks will be based on their maximum daily flow rate. By assigning maximum daily flow rates to septic tanks, there will be consistency in how to choose the proper size septic tank or aerated treatment tank.

(The present code, in effect until the Comm 83 revisions are implemented (possibly July 1, 2000), bases the required size of a septic tank on either liquid capacities listed in Comm 83 Table 12, plus 750 gallons for public facilities, or the number of bedrooms for 1- and 2-family residences.)

Does all of this mean that tank sizing is changing? The answer is, "Yes." Does it mean the change will be drastic? The answer is, "No."

To compare the present with the new, look at the table below. The new code sizing is based on a three-year service interval.

The assigned maximum daily flow rate for septic

tanks will be based on:

1. The tank's ability to treat the design flow that the tank will receive from residential domestic wastewater or other wastewater that has typical average value of BOD<sub>5</sub> of 392 mg/L, SS of 436 mg/L, and Fats, Oils and Grease of 70 mg/L; and
2. The tank's ability to retain scum and sludge that accumulates in the tank over a three-year period.

By using the *Wisconsin Plumbing Product Register*, starting this July designers will determine which size tank is required by comparing the design wastewater flow of the system to the rated gallon per day flow of the tank, which will be listed in the *WPPR* after the model number of the tank. See the example at the bottom of this page.

**Note WPPR information is on the S&B WebSite: Choose "Publications" at <http://www.commerce.state.wi.us/SB/SB-HomePage.html>.**

If you have questions, please contact Dan Jensen, 608-267-5265, [djensen@commerce.state.wi.us](mailto:djensen@commerce.state.wi.us), or Mike Beckwith, 608-266-6742 [mbeckwith@commerce.state.wi.us](mailto:mbeckwith@commerce.state.wi.us).

# of bedrooms (design wastewater flow)	Minimum volume of Septic Tank based on present code	Minimum volume of Septic Tank based on new code
1 ( 150 gpd ) .....	750 .....	313
2 ( 300 gpd ) .....	750 .....	626
3 ( 450 gpd ) .....	975 .....	940
4 ( 600 gpd ) .....	1,200 .....	1,253
5 ( 750 gpd ) .....	1,425 .....	1,566
6 ( 900 gpd ) .....	1,650 .....	1,877
7 ( 1050 gpd ) .....	1,875 .....	2,192
8 ( 1200 gpd ) .....	2,100 .....	2,505

Model Number: 1000 (GPD 504, L.L. 47.0", 22.4 GAL/IN., 84" MAX. DEPTH OF BURY)

GPD means the maximum gallons per day flow through the tank.

L.L. means the distance from the bottom of the tank to the liquid level in the tank.

GAL/IN. mean the average number of gallons per one-inch depth of the tank.

MAX. DEPTH OF BURY means the maximum amount of soil cover over the tank cover for a typical tank produced by the manufacturer.



# S&B now oversees mobile home dealers and sellers, and mobile home parks

by Laurence J. Swaziek, S&B Manufactured and Mobile Home Program Manager, 608-267-7701, [lswaziek@commerce.state.wi.us](mailto:lswaziek@commerce.state.wi.us)

The 1999 state budget bill moved titling of mobile homes and licensing of mobile home dealers (firms), sellers (salespeople), and mobile home parks to the Department of Commerce, Safety and Buildings Division.

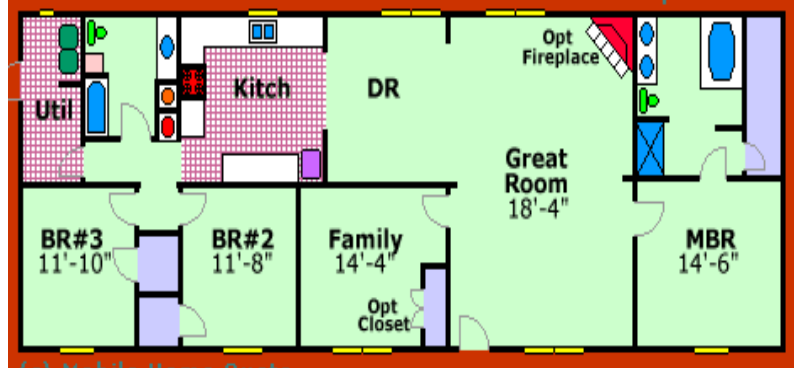
The Department of Transportation (DOT) has regulated titling of mobile homes, and the Department of Administration (DOA) regulated licensing of mobile dealers, sellers, and mobile home parks.

Effective July 1, 2000, those titling and licensing duties officially will be shifted to S&B. The division will also continue to license manufactured-home manufacturers, regulate installation of manufactured homes for compliance with Comm 27 (Manufactured Homes Code), and regulate additions to manufactured homes for compliance with requirements of the Uniform Dwelling Code, Comm 20-25.

By agreement with DOA, Safety and Buildings has already taken on responsibility of the licensing work, even though the statute language does not change until July 1. The licensing processes do not change.

Regulations for mobile home parks will still be covered by rules in Adm 65 (Mobile Home Parks Code). The licensing of dealers and sellers will still be covered by Adm 66 (Manufactured Home Dealer Financial Eligibility Code), Adm 67 (Manufactured Home Dealer Trade Practices, Facilities, and Records Code), and Adm 68 (Licensing Periods and Fees for Manufactured Home Dealers and Salespersons Code).

S&B's work now includes licensing of new mobile



home dealers, sellers, and park owners/sites; licensing renewal of existing mobile home dealers, sellers, and park owners/sites; and plan review of new mobile home parks and additions. For information on licensing or plan review, contact the S&B Mobile Home Unit at 608-264-9596.

I do not anticipate DOT's titling program will be transferred to S&B prior to July 1. I'll keep you posted as to the progress in future *WPCR* articles, and through the S&B website, [www.commerce.state.wi.us/SB/SB-HomePage.html](http://www.commerce.state.wi.us/SB/SB-HomePage.html).

Complaints/inspections for mobile home parks or dealers as related to compliance with ADM 65, 66, 67, 68, and applicable statutes will be processed through the Field Operations Bureau of S&B. The phone contact for those complaints is 608-266-8577. Landlord/tenant issues continue to be handled by the Department of Agriculture and Consumer Protection, 800-422-7128.

For general information on these programs, contact the S&B Mobile Home Unit, 608-264-9596, [mganeshapillai@commerce.state.wi.us](mailto:mganeshapillai@commerce.state.wi.us).

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## Safety and Buildings-related codes are on the Internet <http://www.legis.state.wi.us/rsb/code/comm>

Not all codes are available electronically. Paper copies may be purchased from Document Sales, 800-362-7253, for credit card purchases, or 608-266-3358.

# When a drain discharges to a catch basin, is it a floor drain or is it a trench drain?

by Lynita Docken, S&B Plumbing Program Manager, 608-785-9349,  
ldocken@commerce.state.wi.us

“The code section to consider is Comm 82.34(4) Garage Catch Basins and Interceptors”

A “trench” is a trench when there is no trap in the fixture drain. A “floor drain” is a floor drain when a trap is provided at the outlet. This is regardless of the shape of the floor drain or trench.

As with all code discussions, we first look to the definitions. Are trench drains, garage catch basins, or floor drains defined in the code? Only “catch basin” is defined, in Comm 82.11(44).

There are no definitions for floor drain or trench drain, so we need to look further into the code. In Comm Table 82.30-1, a floor drain is a “fixture,” while a trench drain is not. Therefore, a floor drain is a separate “plumbing fixture,” while a trench drain is not a fixture. Further, a catch basin is not included in Table 82.30-1, so a catch basin is considered a floor drain for drainage fixture unit calculations.

Comm 82.34(4) includes information about connecting trapped floor drains and trench drains to garage catch basins. The trapped floor drain connection requirements are listed under Comm 82.34(4)(a)1.i. The sentence including, “... change in elevation of the fixture drain between the trap weir of the floor drain and the catch basin shall not exceed the diameter of the fixture drain pipe,” means floor

drains must be connected individually to garage catch basins.

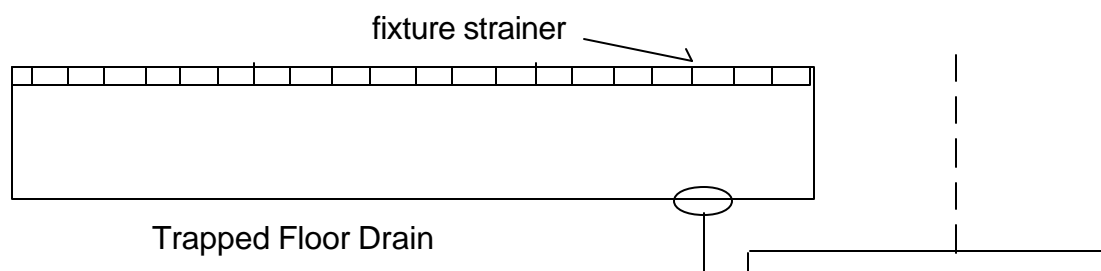
One exception to the individual floor drain connection is provided when a local vent is installed according to Comm 82.34(4)(a)2.e, where the code permits eight trapped floor drains to connect individually to a local vent .

Other exceptions are permitted when the catch basin inlet is submerged. Trench drain connection requirements are listed under Comm 82.34(4)(a)3. The fixture drain of the trench drain is required to be a minimum diameter of four inches when subject to vehicular traffic (and three inches when not), and is also required to extend at least six inches below the water line of the catch basin. This requirement replaces the necessity of the trap on trench fixture drains.

So. . . a “trench” is a trench when there is no trap in the fixture drain. A floor drain is a floor drain when a trap is provided at the outlet. This is regardless of the shape of the floor drain or trench.

If you have questions about floor drains and/or trench drains, contact a plumbing plan reviewer or consultant listed on page 2 of this *WPCR*.

A question relating to this discussion is: Where is the fixture strainer of a floor drain when it’s shaped like a trench drain? The fixture strainer is at floor level. See the drawing below. Refer to Comm 82.32(4)(b)1.a.



# Employment Opportunity

## Chief, Field Operations Section - Madison - Career Executive

Department of Commerce; Safety and Buildings Division, Field Operations Section. Starting salary is between \$ 43,275 and \$63,508 per year, depending upon qualifications, plus excellent benefits. A two-year career executive trial period may be required.

**Duties:** Direct a section that is responsible for complex engineering and technical inspection, consultation, and credentialing functions for the division's public employment occupational safety, amusement ride, ski lift and tow safety, industrial hygiene, and mine safety programs. Supervise a technical staff; develop and manage section budget; develop policies and operating procedures; plan and direct section staff services; provide technical consultation to staff; participate as a member of the division management team; contribute to strategic planning process; participate in development of methods pertaining to fiscal control, budget, personnel, planning, policy development, process-re-engineering, and other management objectives. Well-qualified candidates will have a four year degree in an ABET accredited industrial or safety engineering program or industrial hygiene program; or civil / mechanical engineering degree and significant coursework/work experience in occupational safety engineering; or PE, EIT; or certification as a licensed designer of engineered systems and significant occupational safety-related experience. This position requires substantial statewide travel and requires a valid Wisconsin driver's license. The ability to maneuver around construction sites is required, including climbing, bending, stooping. The individual hired must become certified as a Commercial Building Inspector within one year from date of hire.

**Knowledge and Skills Required:** General management principles; budget management principles; general supervisory principles and practices; engineering principles, including occupational safety engineering.

**How to Apply:** Apply with the Application for State Employment form (DER-MRS-38), a resume, and a brief letter of interest detailing your education, training, credentials and experience (including years of experience) related to: 1). Technical applications of occupational safety engineering principles, practices, and associated standards, administrative codes, enforcement activities; investigations / inspections; 2). Supervision of engineering/technical staff (e.g. hiring, disciplining, training, etc.); include years of experience and type of staff supervised; 3). Program management, which may include program planning, strategic planning, policy-making, goal-setting, budget and fiscal development, activities planning, etc. (Provide specific information regarding the nature of programs managed); 4. Knowledge of/experience with Comm 4, 7, 8, 9, 30, and 32-35. Send application materials to Dale Bartz, Department of Commerce Personnel; 201 West Washington Avenue; P.O. Box 7970; Madison, WI. 53707-7970; Fax: 608-266-0182; email: dbartz@commerce.state.wi.us. Application materials will be accepted until the needs of the division are met, with the first review the week of April 10, 2000. Application materials will be evaluated to determine those applicants qualified to be considered further in the selection process.

State administrative codes and the code update service may be purchased by contacting state Document Sales, 608-266-3358, or 800-362-7253, for credit card purchases. ❖ ❖ ❖ ❖ ❖ ❖

# Details of Subchapters IV, V, and VI of the revised Comm 83, Wisconsin's POWTS Code

By Roman Kaminski, S&B POWTS Program Manager, 715-345-5334, rkaminski@commerce.state.wi.us

**Subchapter IV – Design and Installation** The purpose of this subchapter is to establish in three key areas minimum parameters for design and installation of Private Onsite Wastewater Treatment Systems: safeguarding public health, minimizing the level of substances which might enter the waters of the state, and delineating performance standards by which to evaluate designs.

A POWTS has to be designed to handle the volume of wastewater it will receive, and to treat it so that final dispersal into soil does not create a human health hazard or a threat to the environment.

This subchapter also lists various design considerations that can affect treatment based on wastewater flows and contaminant loads. It also includes information and formulas on calculation of estimated flows and design flows. Unlike the current code, which addresses combined blackwater and graywater flows, this subchapter has separate subsections for blackwater and graywater.

One subsection addresses influent quality. The POWTS design basis is “residential strength” wastewater. “Higher strength” wastewater, such as may be generated by a commercial or public facility that serves food, must be pre-treated before it enters a POWTS treatment or dispersal component that consists of in situ soil.

Unlike previous subchapters, this subchapter contains much prescriptive language as it relates to design and installation of POWTS. There is specific information on design considerations based on effluent quality, location of POWTS components, and installation requirements. There are also tables containing information on horizontal and vertical separation distances and soil application rates.

**Subchapter V – Management** This subchapter is devoted to requirements for servicing and

management of POWTS. All POWTS must be maintained so as to not create a human health hazard. Many questions have already been asked about who is responsible for seeing that maintenance is done. The answer is that owners are ultimately responsible for operating and maintaining POWTS located on their properties. Does this mean homeowners should perform the maintenance work? No, that work should be performed by someone trained in the technology to be serviced. The revised Comm 83 includes establishment of a new credential – “POWTS Maintainer.” The goal is to create a pool of knowledgeable, trained individuals that can service and maintain more advanced treatment technologies.

There are separate subsections about servicing requirements for POWTS. All systems approved after the effective date of the code (the date is scheduled as July 1, 2000), will have to be maintained according to an approved management plan. However, an important provision also states that POWTS existing prior to the effective date of the code must be serviced according to provisions of the revised code and according to any requirements of the system manufacturer or designer.

There is a reporting requirement that maintenance, inspection, or servicing events must be reported within 10 business days by the owner or their representative to the Safety and Buildings Division or an agent (county) designated by S&B.

**Subchapter VI – Recognized Methods and Technologies** This subchapter identifies nine component manuals containing methods and technologies conforming with subchapters IV and V, and which may be used in design of POWTS for specific projects. A design based on one or more of these component manuals can be submitted for plan review without inclusion of extensive documentation supporting the specific design.

This code also allows design of POWTS which, while not based on the specifications found in the component manuals, still comply with performance standards outlined in the code. The key difference is that this type of design submittal must be accompanied by extensive documentation to support treatment and performance claims. The plan review process for this type of submittal will be much more intensive because research and verification of performance claims will have to be made. The proposed revised fee structure in Comm 2 is reflective of the differing work involved in reviewing the two types of plan submittals.

### **Subchapter VII – Department Performance**

**Monitoring** Because of need for an ongoing source of information on performance of POWTS designs, S&B will have a performance monitoring program for various POWTS methods and technologies. This program will be in addition to the periodic inspection and monitoring program outlined in Subchapter V.

One purpose is to provide additional information on long-term performance of POWTS methods and technologies, to confirm their reliability, and to provide data for improvements. Another purpose is to conduct monitoring for long-term compliance with groundwater standards.

Remember, the S&B WebSite contains the final draft of the code and copies of the nine component manuals for your review. You can download these documents, if you so desire. See, <http://www.commerce.state.wi.us/SB/SB-HomePage.html>.

Also, if you are a soil tester, designer, or installer, remember to keep in touch with the counties in which you work. Many of the counties are in the process of amending their ordinances to reflect the revised code. The revised ordinances may contain changes that will be important to you as you contemplate what POWTS treatment options are available for a specific location.

**Excerpts from the Mound Component Manual which begin on page 14 of the printed WPCR are not available in the PDF file. They are available in two formats from links in the HTML File, article #14, <http://www.commerce.state.wi.us/SB/SB-PlumbingCodesReportMay00.html> The full manuals are available in Publications, <http://www.commerce.state.wi.us/SB/SB-Publications.html>.**

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## Employment Opportunity

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### Engineering Consultant - Buildings Systems - Statewide

Department of Commerce; Division of Safety and Buildings. Salary: \$31,386 per year, plus excellent benefits. This classification is represented by the State Engineering Association. An immediate vacancy exists in the La Crosse office. The register created through this recruitment will be used to fill vacancies in other locations in the state which may occur during the next six months.

**Duties:** Examine building construction, structural, and heating, ventilating, air conditioning (HVAC) plans to ensure protection of the health, safety, and welfare of the public and employees; assure that minimum standards are attained in design, construction, structural strength, quality of materials, adequate egress facilities, natural lighting and ventilation, energy conservation, and fire safety for all public buildings and places of employment in accordance with requirements of Wisconsin Administrative rules; communicate with architects, engineers, designers, contractors, and owners to respond to technical inquiries, explain compliance issues, provide code interpretations, and resolve problems; develop and maintain an awareness of codes, engineering principles, and practices; and perform field inspections as directed.

**Knowledge and skills:** Knowledge of architectural and engineering practices and principles; HVAC practices and principles; Wisconsin Administrative Code as it applies to building and HVAC plan review; and effective oral, written, and interpersonal communication techniques. Well - qualified candidates will have a four-year degree in a related field of engineering or architecture, EIT, PE, Registered Architect, Registered Designer License, or equivalent.

**How to apply:** For special application/examination materials, call or write Dale Bartz; Commerce Personnel; 201 W. Washington Ave; PO Box 7970; Madison, WI 53707-7970; 608-266-0366; fax 608-266-0182; email: [dbartz@commerce.state.wi.us](mailto:dbartz@commerce.state.wi.us). Completed materials will be evaluated and the most qualified applicants invited to participate in the next step of the selection process.

**Excerpts from the Mound Component Manual which begin on page 14 of the printed WPCR are not available in the PDF file. They are available in two formats from links in the HTML File, article #14, <http://www.commerce.state.wi.us/SB/SB-PlumbingCodesReportMay00.html> The full manuals are available in Publications, <http://www.commerce.state.wi.us/SB/SB-Publications.html>.**

## **UW POWTS Continuing Education**

Courses for CST, MP, MPRS, JP, JPRS and POWTS  
Insp. are scheduled for May 2000

### **May 23, Monroe County**

\*\*Soil Profile Description, 4 credit hours, a.m. and p.m. session, Instructor Jerry Tyler, et al., \$48, (outdoor soil pits)

### **May 25, Washington County**

\*\*Soil Profile Description, 4 credit hours, a.m and p.m. sessions, Instructor Jerry Tyler et al, \$48, (outdoor soil pits)

\*\*Design and Update of Wisconsin Mound and At-Grade Systems, 3.5 credit hours, morning session, Jim Converse, \$35

\*\*"New Tech" Systems - Inspection, Monitoring and Maintenance, 3 credit hours, afternoon session, Jim Converse, \$35

For registration or additional information, contact Joyce McConnell or Jim Peterson at UW-Madison Environmental. Resources Center, 608 262-0020; FAX 262-2031; email [jopeters@facstaff.wisc.edu](mailto:jopeters@facstaff.wisc.edu), 1450 Linden Drive, Madison, 53706-1562

Check Small Scale Wastewater Management Program website:  
<http://www.wisc.edu/sswmp/> for additional educational opportunities.